AMENDMENTS TO THE CLAIMS

1. (Original) A continuous process for preparing alkylamines by reacting C_{1-4}-alkanols with ammonia in the gas phase in the presence of a shape-selective fixed-bed catalyst in a cooled reactor, wherein the shape-selective fixed-bed catalyst is present in a single contiguous fixed bed in the reactor and tubes through which coolants are passed run within the fixed bed to regulate the temperature of the fixed bed.

2. (Original) A process as claimed in claim 1, wherein cooling is carried out by means of boiling water cooling.

3. (Currently amended) A process as claimed in ~~claim 1 or 2~~claim 1, wherein the pressure in the coolant is from 40 to 220 bar and the pressure in the fixed catalyst bed is from 10 to 50 bar.

4. (Original) A reactor for the reaction of C_{1-4}-alkanols with ammonia in the gas phase for preparing alkylamines, which comprises a shape-selective fixed-bed catalyst which is present as a single contiguous fixed bed in the reactor and through whose interior tubes through which a coolant can be passed run.

5. cancelled

6. (Original) A continuous process for preparing alkylamines by reacting C_{1-4}-alkanols with ammonia in the gas phase in the presence of a shape-selective fixed-bed catalyst in a reactor, wherein part of the C_{1-4}-alkanols, the ammonia or mixtures thereof is introduced in liquid form into the reactor in such a way that vaporization takes place on the fixed catalyst bed.

7-10 cancelled

11. (New) A continuous process for preparing alkylamines by reacting C_{1-4}-alkanols with ammonia in the gas phase in the presence of a shape-selective fixed-bed catalyst in a reactor, wherein 30 - 90% of the C_{1-4}-alkanols, the ammonia or mixtures thereof introduced into the reactor is fed into the fixed catalyst bed at least one point at which a previously reacted reaction mixture of C_{1-4}-alkanols and ammonia which has a temperature higher than that of the C_{1-4}-alkanols, ammonia or mixtures thereof fed in is present.

12. (New) A continuous process for preparing alkylamines by reacting C_{1-4}-alkanols with ammonia in the gas phase in the presence of a shape-selective fixed-bed catalyst in a reactor, wherein a heat transfer medium which is inert toward the C_{1-4}-alkanols and ammonia and the reaction products and/or does not significantly affect the activity and selectivity of the catalyst is additionally fed into the fixed catalyst bed by addition to the reactor feed mixture.

13. (New) A process as claimed in claim 12, wherein the heat transfer medium is or comprises water.

14. (New) A process as claimed in claim 11 carried out in a reactor for the reaction of C_{1-4}-alkanols with ammonia in the gas phase for preparing alkylamines, which comprises a shape-selective fixed-bed catalyst which is present as a single contiguous fixed bed in the reactor and through whose interior tubes through which a coolant can be passed run.

15. (New) A process as claimed in claim 6 carried out in a reactor for the reaction of C_{1-4}-alkanols with ammonia in the gas phase for preparing alkylamines, which comprises a shape-selective fixed-bed catalyst which is present as a single contiguous fixed bed in the reactor and through whose interior tubes through which a coolant can be passed run.

16. (New) A process as claimed in claim 12 carried out in a reactor for the reaction of C_{1-4}-alkanols with ammonia in the gas phase for preparing alkylamines, which comprises a shape-selective fixed-bed catalyst which is present as a single contiguous fixed bed in the reactor and through whose interior tubes through which a coolant can be passed run.

17. (New) A process as claimed in claim 11 carried out in a reactor for the reaction of C_{1-4}-alkanols with ammonia in the gas phase for preparing alkylamines, which comprises a shape-selective fixed-bed catalyst which is present as a single contiguous fixed bed in the reactor and

through whose interior tubes through which a coolant can be passed run, wherein the C_{1-4}-alkanols, ammonia or mixtures thereof introduced into the reactor are fed in radially to the longitudinal axis of the reactor.

18. (New) A process as claimed in claim 6 carried out in a reactor for the reaction of C_{1-4}-alkanols with ammonia in the gas phase for preparing alkylamines, which comprises a shape-selective fixed-bed catalyst which is present as a single contiguous fixed bed in the reactor and through whose interior tubes through which a coolant can be passed run, wherein the C_{1-4}-alkanols, ammonia or mixtures thereof introduced into the reactor are fed in radially to the longitudinal axis of the reactor.

19. (New) A process as claimed in claim 12 carried out in a reactor for the reaction of C_{1-4}-alkanols with ammonia in the gas phase for preparing alkylamines, which comprises a shape-selective fixed-bed catalyst which is present as a single contiguous fixed bed in the reactor and through whose interior tubes through which a coolant can be passed run, wherein the C_{1-4}-alkanols, ammonia or mixtures thereof introduced into the reactor are fed in radially to the longitudinal axis of the reactor.